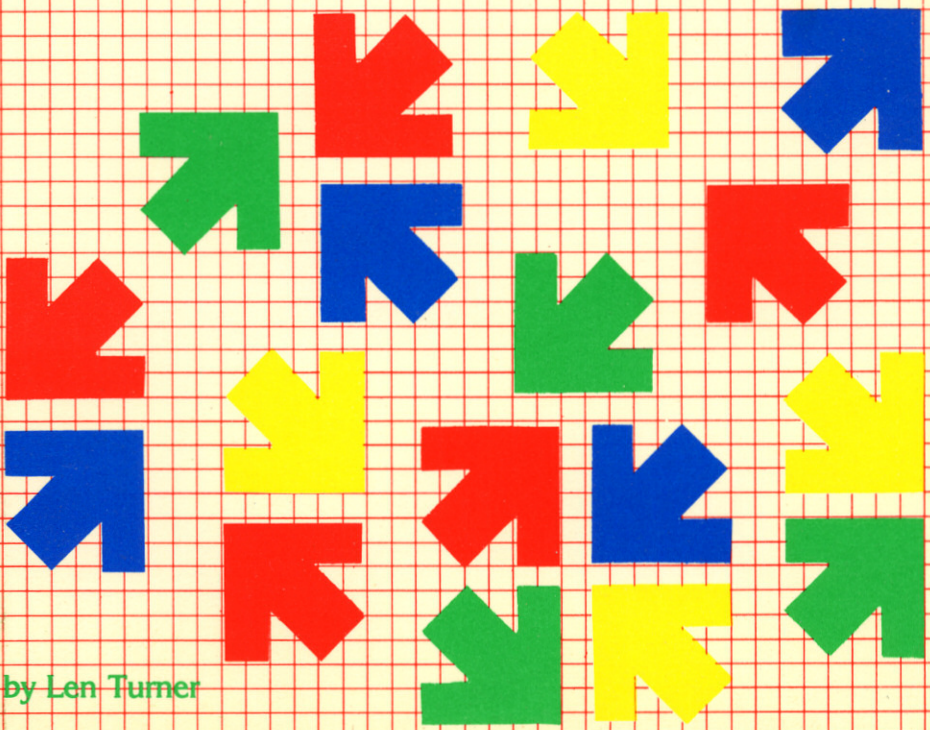
$8.95

Texas Instruments Home Computer Games Programs

Two dozen all-new, exciting and different space games, adventures, number games, memory games and other game programs using TI BASIC.



by Len Turner

Texas Instruments Home Computer Games Programs

Programming Books by Len Turner

101 Programming Tips & Tricks for the Texas Instruments TI-99/4A Home Computer

36 Texas Instruments TI-99/4A Programs for Home, School & Office

Texas Instruments Computer Program Writing Workbook

Texas Instruments Home Computer Games Programs

Texas Instruments Home Computer Graphics Programs

Texas Instruments Home Computer Games Programs

by Len Turner

ARCsoft Publishers
WOODSBORO, MARYLAND

FIRST EDITION
FIRST PRINTING

ISBN 0-86668-032-2

Table of Contents

Preface

The Texas Instruments microcomputers are among the world's most popular systems for use in the home, classroom and small-business office. In fact, the TI-99/4A probably is the all-time best-selling home computer to date. And, most of all, it is fun for playing games!

The lightweight desktop design of the TI-99/4A, the convenient portability of the Compact 40, the powerful BASIC language capability of all the TI microcomputers place them in the forefront of the new wave of personal computers for hobbyists, students, teachers, professionals, business persons and all who want to learn the new technology.

These are not toys! Their hardware and software combinations make them highly useful tools in the business environment and the classroom as well as for practical jobs around the home.

The total number of applications to which the Texas Instruments home, personal and business microcomputers can be put is limited only by the scope of the imagination. In this book, we have attempted to create and share two-dozen new sets of game programs for your use.

This book, as well as all published by *ARCsoft Publishers*, is written for newcomers, novices and first-timers, as well as for advanced users of microcomputers. Our intention has been to provide easy-to-type-in-and-run programs for the Texas Instruments home and business microcomputers. You type these programs into your computer and it does the rest. You do not have to be a program writer to use this book!

This volume is a companion book to *101 Programming Tips & Tricks for the Texas Instruments TI-99/4A Home Computer*, *36 Texas Instruments TI-99/4A Programs for Home, School & Office*, *Texas Instruments Computer Program Writing Workbook*, and *Texas Instruments Home Computer Graphics Programs*.

—Len Turner

Introduction

Computer games! The rage of the Century. Everybody is playing them everywhere. And now you can play them on your own Texas Instruments computer.

There is a great need for practical, useful software for the new generation of popular personal computers. The Texas Instruments models TI-99/4A Home Computer, TI-99/2 computer, Compact 40 portable computer, and other TI personal/home/business microcomputers, for instance, are among the world's most popular gear. The TI computers are powerful and versatile and flexible—but what can they do? Once you've purchased the hardware, you need down-to-earth workable programs to run the computer.

The aim of this book is to provide two dozen complete easy-to-type-in ready-to-run new and different sets of program listings for you to use in your own TI, to make your computer work for you.

These programs are very useful in themselves. They also make good starting points for further development as you learn more and more about how to program your own computer. You can learn a great deal about how BASIC programs are organized and how they work simply by typing in these programs. Use these fun and practical programs and, then, modify them and expand them to suit your needs as your interests grow.

These programs are designed to be typed into your computer, via its keyboard console, just as you find the programs printed here in this book. No other programming is needed. We assume you have read the owner's manuals and instructional pamphlets which came with your computer and accessories. You know how to hook up the console to the TV modulator/connector and to any other accessories you may have purchased. You know how to type the programs into your TI computer. You *do not have to be a programmer* to use these pieces of soft-

ware. Just type them in, as you find them here, and run them. They will work!

These programs do not require tape or disk, unless you choose to save them on those media. These programs are so easy to type in you can save this book and retype them whenever you wish to rerun a program.

Computer printouts

To make sure there are no errors in these programs, we have written and tested each and every program on our own TI-99/4A *and* printed every one on a TI-99 line printer. The hardcopy printout from that line printer is reproduced directly in this book!

The TI computer operated the printer and listed these programs. No human hands came between the computer and these listings so no re-typing or proofreading errors have been introduced. You should find these programs run exactly as reproduced here.

If, after typing in a program from this book, you get an error message from your TI computer, compare your typed program lines with the program lines reproduced in this book.

Undoubtedly, you will find you have made a typing error in entering the program lines into your TI. However, should you find an error in a program in this book, please call it to the attention of the author by sending a postcard or letter to him in care of *ARCsoft Publishers*, P.O. Box 132, Woodsboro, MD 21798 USA. The author will appreciate being able to make any necessary corrections to future editions of this book.

Random numbers

The computer's ability to generate random numbers is exciting to watch. And such random numbers are needed for most computer-game programs today. We use lots of random-number generators in the games in this book.

For your convenience, we have included an Appendix of various random-number generating programs. We also include a practical games application: a program to roll dice.

In addition, in the Appendix at the back of this book you will find a convenient game timer program which you may find useful in timing various events.

Endless running

Many of the programs in this book will continue to run until you command them off manually via the CLEAR function. You may stop any run, at any time, by use of the CLEAR function.

The function key is in the lower right corner of the console keyboard and is labeled FCTN. Press and hold FCTN and press the number 4 key in the upper row of keys. The combination of FCTN and 4 creates the CLEAR instruction to the computer.

This CLEAR function is the same as what is called BREAK in other microcomputers.

Here is an example of how the CLEAR function works in the TI computer. Type in this brief two-line program. Type in line 10 and press ENTER. Then type in line 20 and press ENTER. This will lodge the complete program in program memory. Here is the program:

```
10 PRINT "XYZ"
20 GOTO 10
```

After you have the program stored in program memory, type in RUN and press ENTER to start the operation. The computer will do as instructed. It will print the letters XYZ repeatedly. In fact, it will go on forever until you stop the action.

To stop the run, press and hold the FCTN key. While holding FCTN down, press the number 4 key. This is the CLEAR function. It will stop the computer run. Try it.

REMarks

As you read through all of the programs in this book, you will notice few REM, or remarks, statements. The author's training in writing BASIC-language computer programs included an emphasis on brevity and saving of memory space. A sharp editing pencil was in order—and still is!

REMarks and explanations in software are out. Honing, fine tuning, and waste trimming are in. Use of coding-form program-writing worksheets is encouraged. Such worksheets can be found in the *Texas Instrument Program Writing Workbook* published by *ARCsoft*

Publishers. Your objective always should be to make the most efficient use of available memory.

Always remember: even though they may be headed toward the same goal, no two programmers will write the exact same list of BASIC instructions, or program lines, from scratch. As you load these various programs into your TI computer, one at a time, you'll make modifications to suit your personal needs and interests. For instance, exact wording of PRINT statements can be changed. Or two or more programs can be combined into one grand scheme. Your applications may vary.

If you want to load more than one of these programs into your TI computer at the same time, be sure to use different sets of line numbers for different programs.

Computer programmers today generally mix the use of the two words, ENTER and RETURN. They are used to mean the same thing. In this case, we mean the ENTER key on the right side of the console keyboard.

Other computers

These programs will run on any computer which is set up to be programmed in BASIC. However, to run these on machines other than ones using TI BASIC as found in the TI-99/4A, you may have to make slight modifications to program lines. Graphic commands, especially, will differ elsewhere. Also use of multiple-statement lines, using the colon (:), is quite different in most other forms of BASIC.

Refer to the owner's manual which came with your non-TI personal computer. Compare its version of BASIC with TI BASIC.

Also, if you use a non-TI microcomputer, such things as line numbering, spacing, logical tests, multiplication symbols, print statements and other instructions may differ.

The author would like to have your suggestions for changes in future editions of this work, or for other titles in this series for the TI computers. The author may be addressed in care of *ARCsoft Publishers*.

Standalone vs. subroutine

All of the programs in this book can be used as portions of larger lists of instructions to your computer. That

is, they can be written in as GOTO or GOSUB objects. To do so, make appropriate changes to the first line (usually numbered 10 in this book) and the last line of each program.

If you create a subroutine, remember that every GOSUB must have a RETURN. RETURN must be the last line of each subroutine.

If you work one of these programs into a larger set of instructions, be especially careful of your memory (variable) names or labels. They must agree with, and fit into, those you are using in the main program. Also, be careful of line numbers. No two programs can occupy the exact same set of line numbers.

If you want to load more than one of these programs into your TI computer at the same time, be sure to use different sets of line numbers.

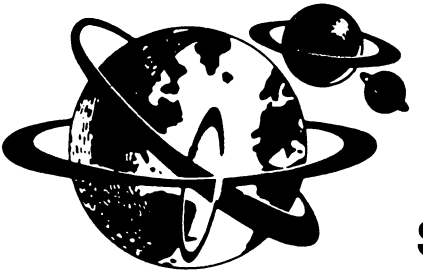
Learning programming

These programs are written to be typed into your TI computer just as you find them here with no programming needed. We assume you know how to turn on your computer and how to go about typing in a program. Many of the programs and much of the programming advice in this book will, in fact, also be of interest to old-timers in the program-writing game since we have presented many powerful new twists aimed at making your computer do more work more quickly.

Amidst the two dozen programs in this book, you will find countless ideas for using your computer. Each program is intended to make you a more-versatile programmer and make your programming chores lighter.

Use this book to stimulate your thinking about how to approach various software problems and projects. Use it to get good ideas for new and different approaches to all of your programming goals. As you grow and develop as a program writer, modify these programs and make your computer do even more.

Happy programming!



Saturn Death

Lights are dimmed to a dull red on the flight deck of the USS Intrepid. Men in your command chatter quietly as their handheld terminal boxes twinkle with vital data. The forward view screen has been showing gigantic Saturn as a tiny ball for days. Now the planet is a giant balloon with the Sun receding from the starboard screens.

Despite the ever-imminent danger in the hostile environment of space, the trip out from Earth Command has been uneventful. Suddenly, the red bullseye flashes on your terminal box. The console under your left elbow brightens and a low buzz emits from its loudspeaker. The ship's main computer sounds an alarm. Life-threatening danger is approaching rapidly. With only seconds to spare, it's you and the computer against the challenge of your life. Death in the frozen void of space lurks nearby.

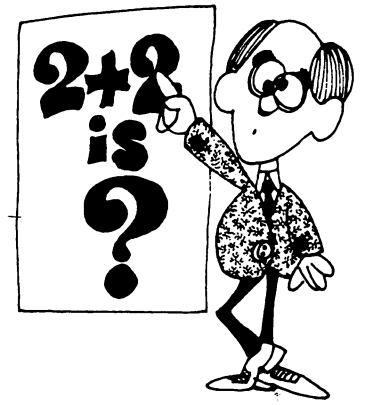
Program Listing

```
10 CALL CLEAR
20 PRINT "**********************"
30 PRINT "*    USS INTREPID    *"
40 PRINT "* HOSTILITY COMPUTER *"
50 PRINT "**********************"
60 FOR L=1 TO 7
70 PRINT
80 NEXT L
100 GOSUB 1400
110 PRINT "RED ALERT"
130 PRINT "*********"
150 PRINT "EARLY WARNING REPORT",
    "DANGER APPROACHING"
```

```
170 RANDOMIZE
180 GOSUB 1400
200 GOSUB 900
210 PRINT
220 IF W=2 THEN 400
230 PRINT "ASTEROID CLOSING FAST"
240 GOSUB 900
250 IF W=1 THEN 310
270 PRINT ,,"NO TIME",,"WE ARE HIT"
300 GOTO 1000
310 PRINT "THERE IS TIME",,"BLAST IT"
320 PRINT
330 GOSUB 900
340 IF W=1 THEN 360
350 GOTO 1200
360 GOSUB 1400
365 PRINT ,,"**  MISSED  **"
370 GOTO 310
400 PRINT "ALIEN DEATH PROBE",
    "COMING IN FAST"
410 GOSUB 900
420 IF W=2 THEN 585
430 GOSUB 1400
460 PRINT ,,"TOO LATE"
    ,,"HE FIRED TORPEDOS"
480 GOSUB 900
490 IF W=1 THEN 580
500 PRINT "WE ARE HIT"
520 GOSUB 900
530 IF W=1 THEN 610
550 PRINT ,,"MUCH DAMAGE",,"SHIP
    EXPLODING"
570 GOTO 1000
580 GOSUB 1400
582 PRINT "**  MISSED  **"
585 PRINT ,,"STANDBY TO FIRE"
590 GOSUB 900
600 GOTO 630
610 PRINT "DAMAGE",,"WE HAVE POWER"
620 GOTO 585
630 IF W=1 THEN 690
```

```
640 PRINT ,,"**  HIT  **"
650 GOSUB 900
660 IF W=2 THEN 710
670 PRINT "DAMAGE BUT HE HAS POWER",
    "WILL FIRE AGAIN"
680 GOTO 410
690 PRINT ,,"**  MISSED  **"
700 GOTO 460
710 GOTO 1200
900 LET W=INT(3*RND)
905 IF W<1 THEN 900
910 IF W>2 THEN 900
920 RETURN
1000 GOSUB 1400
1010 PRINT
1020 PRINT "THIS IS THE END"
1025 GOSUB 1400
1030 LET A$="TOO BAD"
1035 GOSUB 1400
1040 GOTO 1240
1200 GOSUB 1400
1220 PRINT "IT IS DESTROYED","ALL ARE
     SAFE"
1225 GOSUB 1400
1230 LET A$="YOU WIN"
1235 GOSUB 1400
1240 FOR L=1 TO 15
1245 PRINT
1250 NEXT L
1260 PRINT TAB(11);A$
1262 FOR L=1 TO 7
1264 PRINT
1266 NEXT L
1270 FOR N=1 TO 12
1280 LET R=12-(10*SIN(N/6*3.14))
1290 LET C=16-(10*COS(N/6*3.14))
1300 CALL HCHAR(R,C,128)
1310 NEXT N
1312 FOR L=1 TO 7
1314 PRINT
1316 NEXT L
1330 PRINT "PRESS SPACE BAR FOR ACTION"
```

```
1340 CALL KEY(0,Z,X)
1350 IF X=0 THEN 1340
1360 GOTO 10
1400 FOR L=1 TO 500
1410 NEXT L
1420 RETURN
```



Memory Tester I

Listen closely. I'm only going to repeat this once:
Apples in the teagarden.
What'd he say?
Apples in the teagarden.
I thought that's what he said.

Now you can rate the holding power of your very own memory, all in the privacy of your own home or office. Simply say how much of a challenge you think you can withstand and such a test will be devised.

Think you know it all? Try this.

Program Listing

```
10 CALL CLEAR
15 PRINT "MEMORY TEST"
20 PRINT "***********"
30 W=0
40 A$="ACT"
50 B$="RADIO"
60 C$="DOG"
70 D$="LAMP"
80 E$="BREAD"
90 F$="LOG"
100 G$="POCKET"
110 H$="TABLE"
120 I$="COLOR"
130 J$="TRAIN"
140 K$="BOOK"
```

```
150 L$="FLOWER"
160 M$="DRAIN"
170 N$="SUPPER"
180 O$="PLAN"
190 P$="CAT"
200 Q$="EVENT"
210 R$="TOY"
220 S$="CLOCK"
230 T$="SHIP"
240 X=0
250 U$=A$
260 V$=B$
270 W$=C$
280 X$=D$
290 GOTO 600
300 U$=E$
310 V$=F$
320 W$=G$
330 X$=H$
340 GOTO 600
350 U$=I$
360 V$=J$
370 W$=K$
380 X$=L$
390 GOTO 600
400 U$=M$
410 V$=N$
420 W$=O$
430 X$=P$
440 GOTO 600
450 U$=Q$
460 V$=R$
470 W$=S$
480 X$=T$
490 GOTO 600
500 CALL CLEAR
505 X=X+4
510 PRINT "YOU GOT ";W;" RIGHT","IN "
    ;Q;" TRIES"
520 PRINT "**************************"
525 GOSUB 1500
530 GOSUB 1500
```

```
540 IF X=4 THEN 300
550 IF X=8 THEN 350
560 IF X=12 THEN 400
570 IF X=16 THEN 450
580 PRINT
590 PRINT "END OF GAME"
595 END
600 GOSUB 1500
610 PRINT
620 PRINT "WATCH CLOSELY..."
630 PRINT
640 GOSUB 1500
650 PRINT U$,,V$,,W$,,X$
660 GOSUB 1500
670 CALL CLEAR
700 PRINT "WHAT WERE THOSE WORDS?"
705 PRINT
800 PRINT "FIRST WORD:",
810 GOSUB 1200
820 IF Y$=U$ THEN 850
830 IF Y$<>U$ THEN 870
840 IF Y$<>U$ THEN 800
845 GOTO 900
850 GOSUB 1300
860 GOTO 830
870 GOSUB 1400
880 GOTO 840
900 PRINT "SECOND WORD:",
910 GOSUB 1200
920 IF Y$=V$ THEN 950
930 IF Y$<>V$ THEN 970
940 IF Y$<>V$ THEN 900
945 GOTO 1000
950 GOSUB 1300
960 GOTO 930
970 GOSUB 1400
980 GOTO 940
1000 PRINT "THIRD WORD:",
1010 GOSUB 1200
1020 IF Y$=W$ THEN 1050
1030 IF Y$<>W$ THEN 1070
1040 IF Y$<>W$ THEN 1000
```

```
1045 GOTO 1100
1050 GOSUB 1300
1060 GOTO 1030
1070 GOSUB 1400
1080 GOTO 1040
1100 PRINT "FOURTH WORD:",
1110 GOSUB 1200
1120 IF Y$=X$ THEN 1150
1130 IF Y$<>X$ THEN 1170
1140 IF Y$<>X$ THEN 1100
1145 GOTO 500
1150 GOSUB 1300
1160 GOTO 1130
1170 GOSUB 1400
1180 GOTO 1140
1200 INPUT Y$
1220 Q=Q+1
1230 RETURN
1300 PRINT "CORRECT"
1310 GOSUB 1500
1320 W=W+1
1330 CALL CLEAR
1340 RETURN
1400 PRINT "WRONG",,"TRY AGAIN"
1410 RETURN
1500 FOR T=1 TO 400
1510 NEXT T
1520 RETURN
```

The Black Pearl

Loves have been lost for it. Families have been broken by it. Men have killed for it: the infamous Black Pearl from Won Quon Luk temple in the Orient.

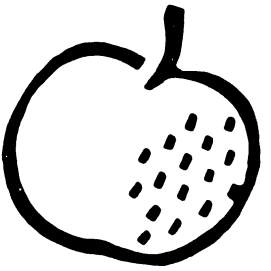
One night in 1946, in a fabulous apartment high above Fifth Avenue in New York City, a svelte blonde in black velvet wore a string of 10 superb pearls. At least, nine superb and one ultimate. Nine whites and the black beauty!

The string broke during a lights-out-at-midnight and were lost. Until now, their whereabouts has been a mystery. Until now, that is, because here they are in this leather pouch. Reach in. Take one. Hope you get the Black Pearl!

Program Listing

```
10 CALL CLEAR
20 C=0
30 D=0
40 CALL CLEAR
45 PRINT "********************"
50 PRINT "* THE BLACK PEARL *"
55 PRINT "********************"
60 PRINT
65 RANDOMIZE
70 PRINT "MY POUCH HAS TEN PEARLS"
80 PRINT "NINE WHITES AND..."
90 PRINT "THE BLACK BEAUTY"
100 PRINT
110 PRINT "EACH HAS A TINY GOLD NUMBER"
```

```
120 PRINT "FROM ONE TO TEN"
130 PRINT "ETCHED ON ITS SURFACE"
140 PRINT
150 PRINT "TAKE A PEARL AND"
160 PRINT "TELL ME ITS NUMBER"
170 PRINT
180 PRINT "IF IT IS THE BLACK PEARL..."
190 PRINT "YOU WIN"
200 PRINT
210 PRINT "WHICH NUMBER DO YOU HAVE?"
220 X=INT(11*RND)
230 IF X<1 THEN 220
235 IF X>10 THEN 220
240 INPUT A
245 C=C+1
250 IF X<>A THEN 300
260 D=D+1
270 GOTO 800
300 CALL CLEAR
310 PRINT "SORRY...",,"THAT ONE IS WHITE"
320 PRINT
325 PRINT "PLEASE TRY A DIFFERENT PEARL"
330 INPUT B
335 C=C+1
340 IF X<>B THEN 300
350 GOTO 260
800 CALL CLEAR
820 PRINT "THAT'S IT",,"YOU HAVE IT"
830 PRINT "THE BLACK PEARL IS","NUMBER ";X
840 FOR L=1 TO 5
850 PRINT
860 NEXT L
870 PRINT "WANT TO PLAY AGAIN?"
880 INPUT E$
890 IF E$="YES" THEN 40
900 IF E$="NO" THEN 930
910 PRINT "PLEASE ANSWER YES OR NO"
920 GOTO 870
930 F=INT((D/C)*1000)
940 CALL CLEAR
950 PRINT "OKAY"
960 PRINT "YOUR FINAL SCORE IS ";F
970 END
```



Barrel of Apples

Albert is a fat kid, about as round as that barrel of apples. Oh, that's Albert's barrel by the way. He carts it around with him. Has a new game he likes to play. And play. And play. It's enough to drive you nuts!

Go ahead. Say hello.

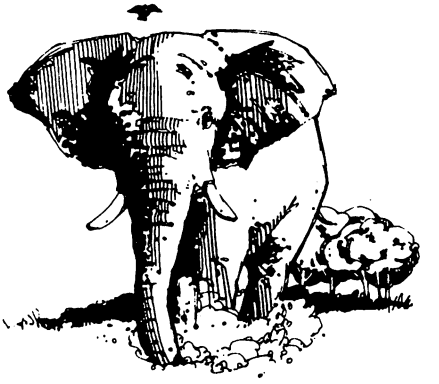
Program Listing

```
10 CALL CLEAR
15 PRINT "HI, I AM ALBERT"
20 PRINT
30 INPUT "WHAT'S YOUR NAME ";L$
40 PRINT ,,
50 PRINT "HI, ";L$
60 PRINT ,"WANT TO PLAY A GAME?"
70 PRINT ,,
80 PRINT "PRESS ANY KEY"
90 CALL KEY(0,Z,X)
95 IF X=0 THEN 90
100 B=0
105 P=0
110 Q=0
115 X=0
120 GOSUB 1100
130 CALL CLEAR
140 GOSUB 1000
170 PRINT "THIS SQUARE BARREL HOLDS"
    ," LOTS OF APPLES"
175 PRINT
180 PRINT "IN FACT, ";L$;",","," UP TO
    100 APPLES"
```

```
190 PRINT
200 PRINT "CAN YOU GUESS HOW MANY"
210 INPUT " IT'S HOLDING RIGHT NOW ":P
220 IF P<1 THEN 210
225 IF P>100 THEN 210
230 B=B+1
240 IF X=P THEN 300
250 GOTO 500
300 Q=Q+1
310 IF B=1 THEN 450
320 CALL CLEAR
330 PRINT "YOU GOT IT"
335 PRINT "CONGRATULATIONS !"
340 PRINT
345 PRINT
350 PRINT "WANT TO PLAY AGAIN, ";L$
360 INPUT R$
370 IF R$="YES" THEN 400
380 IF R$="NO" THEN 800
385 PRINT "PLEASE ANSWER YES OR NO"
390 GOTO 340
400 X=0
410 P=0
420 GOTO 120
450 CALL CLEAR
460 PRINT "WOW !"
465 PRINT "RIGHT THE FIRST TIME"
470 PRINT ,"YOU QUALIFY AS A GENIUS"
480 GOTO 340
500 IF P<X THEN 600
510 IF P>X THEN 700
600 CALL CLEAR
610 PRINT "WRONG"
615 PRINT "THERE ARE MORE THAN THAT"
620 PRINT
630 INPUT "PICK A LARGER NUMBER ":P
650 B=B+1
660 GOTO 240
700 CALL CLEAR
710 PRINT "SORRY..."
715 PRINT "THAT'S TOO MANY"
720 PRINT
```

```
730 INPUT "GO FOR A SMALLER NUMBER ";P
750 GOTO 650
800 CALL CLEAR
810 PRINT "OKAY, ";L$
820 PRINT "YOU HAD ";Q;" RIGHT"
830 PRINT "IN ";B;" TRIES"
840 C=INT((Q/B)*1000)
850 PRINT
860 PRINT "YOU BATTED ";C
870 PRINT
880 PRINT "BYE BYE, ";L$
900 END
1000 FOR H=10 TO 20
1010 FOR Y=10 TO 20
1020 CALL HCHAR(Y,H,79)
1030 NEXT Y
1040 NEXT H
1050 RETURN
1100 RANDOMIZE
1110 X=INT(101*RND)
1120 IF X<1 THEN 1110
1130 IF X>100 THEN 1110
1140 RETURN
```

Lost Safari



Jim Buck, the famous safari guide, has been deep in the bush of darkest Africa, leading a party of big game hunters for days when word arrives at his London headquarters that he is lost. The telegram doesn't say what country on the African continent he is in. Nor does it tell what big game he is hunting. You'll have to apply your best deductive reasoning and come up with his prey and his location if you are to save his life and the lives of three men and two women on safari with Big Jim.

But the jungle is full of traps. Once you have discovered which animal he is hunting you'll know whether he is up-country or down-country or in the back country. But the jungle is full of traps. Having settled all that, it's still not clear whether you can fly in, in time to save the party from certain death at the hands of a tribe of giant pygmies. If only you can fly in in the right number of days, all will be saved. Hurry!

Program Listing

```
10 CALL CLEAR
20 PRINT "***************"
25 PRINT "* LOST SAFARI *"
30 PRINT "***************"
35 PRINT
40 RANDOMIZE
45 PRINT
```

```
50 B$="RHINO"
60 C$="GAZELLE"
70 D$="HIPPO"
80 E$="LION"
90 F$="ZEBRA"
100 G$="TIGER"
110 H$="KENYA"
120 I$="CONGO"
130 J$="NIGERIA"
140 K$="SUDAN"
150 L$="TOGO"
160 M$="LESOTHO"
170 A1=INT(7*RND)
175 IF A1<1 THEN 170
180 IF A1>6 THEN 170
190 A2=INT(7*RND)
195 IF A2<1 THEN 190
200 IF A2>6 THEN 190
210 A3=INT(7*RND)
215 IF A3<1 THEN 210
220 IF A3>6 THEN 210
230 IF A1=1 THEN 234
232 GOTO 240
234 S$=B$
240 IF A1=2 THEN 244
242 GOTO 250
244 S$=C$
250 IF A1=3 THEN 254
252 GOTO 260
254 S$=D$
260 IF A1=4 THEN 264
262 GOTO 270
264 S$=E$
270 IF A1=5 THEN 274
272 GOTO 280
274 S$=F$
280 IF A1=6 THEN 284
282 GOTO 290
284 S$=G$
290 IF A2=1 THEN 294
292 GOTO 300
294 T$=H$
```

```
300 IF A2=2 THEN 304
302 GOTO 310
304 T$=I$
310 IF A2=3 THEN 314
312 GOTO 320
314 T$=J$
320 IF A2=4 THEN 324
322 GOTO 330
324 T$=K$
330 IF A2=5 THEN 334
332 GOTO 340
334 T$=L$
340 IF A2=6 THEN 344
342 GOTO 350
344 T$=M$
350 PRINT
360 PRINT "THE SAFARI IS LOST"
370 PRINT "SOMEWHERE IN..."
380 PRINT
390 PRINT H$,I$,J$,K$,L$,M$
400 PRINT
410 PRINT
420 PRINT
430 PRINT "TO START YOUR SEARCH"
435 PRINT "PRESS THE SPACE BAR"
440 CALL KEY(0,Z,X)
445 IF X=0 THEN 440
450 CALL CLEAR
460 PRINT "WHAT ARE THEY HUNTING?"
470 PRINT
475 PRINT B$,"PRESS B"
476 PRINT C$,"PRESS C"
477 PRINT D$,"PRESS D"
478 PRINT E$,"PRESS E"
479 PRINT F$,"PRESS F"
480 PRINT G$,"PRESS G"
485 CALL KEY(0,Z,X)
487 IF X=0 THEN 485
490 IF Z<66 THEN 485
492 IF Z>71 THEN 485
495 IF Z=66 THEN 497
496 GOTO 500
```

```
497 O$=B$
500 IF Z=67 THEN 502
501 GOTO 505
502 O$=C$
505 IF Z=68 THEN 507
506 GOTO 510
507 O$=D$
510 IF Z=69 THEN 512
511 GOTO 515
512 O$=E$
515 IF Z=70 THEN 517
516 GOTO 520
517 O$=F$
520 IF Z=71 THEN 522
521 GOTO 530
522 O$=G$
530 IF O$=S$ THEN 580
540 GOSUB 1000
570 GOTO 470
580 GOSUB 1200
590 PRINT
600 PRINT
610 PRINT "NOW FIND THEM"
620 PRINT
630 PRINT "ARE THEY IN..."
640 PRINT
645 PRINT H$,"PRESS H"
646 PRINT I$,"PRESS I"
647 PRINT J$,"PRESS J"
648 PRINT K$,"PRESS K"
649 PRINT L$,"PRESS L"
650 PRINT M$,"PRESS M"
655 CALL KEY(0,Z,X)
660 IF X=0 THEN 655
661 IF Z<72 THEN 655
662 IF Z>77 THEN 655
665 IF Z=72 THEN 667
666 GOTO 670
667 R$=H$
670 IF Z=73 THEN 672
671 GOTO 675
672 R$=I$
```

```
675 IF Z=74 THEN 677
676 GOTO 680
677 R$=J$
680 IF Z=75 THEN 682
681 GOTO 685
682 R$=K$
685 IF Z=76 THEN 687
686 GOTO 690
687 R$=L$
690 IF Z=77 THEN 692
691 GOTO 700
692 R$=M$
700 IF R$=T$ THEN 750
710 GOSUB 1000
740 GOTO 640
750 GOSUB 1200
760 PRINT
770 PRINT "NOW RUSH TO SAVE THEM..."
780 PRINT
790 PRINT "HOW MANY DAYS"
795 PRINT "FROM ONE TO SIX"
800 PRINT "WILL IT TAKE TO GET THERE?"
810 PRINT
815 CALL KEY(0,Z,X)
820 IF X=0 THEN 815
825 IF Z<49 THEN 815
830 IF Z>54 THEN 815
840 Z=Z-48
845 IF Z=A3 THEN 880
850 GOSUB 1000
855 PRINT
860 PRINT "TRY A DIFFERENT NUMBER"
865 PRINT
870 GOTO 790
880 GOSUB 1200
885 PRINT
890 PRINT "HOORAY!"
895 PRINT "YOU SAVED THE SAFARI"
900 PRINT "HUNTING ";S$;" IN ";T$
905 PRINT "IN ";A3;" DAYS"
910 TT=WW+RR
915 PRINT
```

```
920 PRINT
925 PRINT "YOU HAD ";RR;" RIGHT ANSWERS"
930 PRINT "AND ";WW;" WRONG GUESSES"
935 PRINT "OUT OF A TOTAL OF ";TT
940 PRINT
945 BA=INT(1000*(RR/TT))
950 PRINT "YOU ARE BATTING ";BA
955 PRINT
960 PRINT
965 PRINT "TO PLAY ANOTHER ROUND"
970 PRINT "PRESS THE SPACE BAR"
975 CALL KEY(0,Z,X)
980 IF X=0 THEN 975
985 RR=0
986 WW=0
987 TT=0
990 GOTO 10
995 END
1000 CALL CLEAR
1010 PRINT "WRONG,  TRY AGAIN"
1020 WW=WW+1
1030 RETURN
1200 CALL CLEAR
1210 PRINT "THAT IS CORRECT"
1220 RR=RR+1
1230 RETURN
```

Scrambled Egg

Ttsae. *Let's see. Oh, I know. State?* Right. Try another. Nidlsa. *Good grief. That's too tough. Give me an easier one.* Okay. Fo. *Well, that's too easy.* What is it? *Of, of course. By the way, what is Nidlsa.* Island. *Oh!*

Try another.

Program Listing

```
10 CALL CLEAR
11 W=0
12 T=0
13 C=0
15 RANDOMIZE
20 PRINT
25 PRINT
45 PRINT "####################"
50 PRINT "#                  #"
55 PRINT "# SCRAMBLED EGG  #"
60 PRINT "#                  #"
65 PRINT "####################"
67 PRINT
70 PRINT "DO YOU WANT THE HARD OR"
75 PRINT "HARDER OR HARDEST WORDS ?"
80 PRINT
85 PRINT "FOR HARD","TYPE 1 AND PRESS
   ENTER"
90 PRINT
95 PRINT "FOR HARDER","TYPE 2 AND PRESS
   ENTER"
```

```
100 PRINT
105 PRINT "FOR HARDEST","TYPE 3 AND
    PRESS ENTER"
110 PRINT
115 INPUT Y
120 ON Y GOTO 9000,8500,8000
200 ON Y GOTO 10000,10500,11000
210 PRINT
220 PRINT "HERE IS THE ";Y$;" WORD"
230 ON Z GOTO 500,1000,1500,2000,2500
    ,3000,3500,4000,4500,5000,5500,6000
235 PRINT
240 PRINT X$
250 PRINT
260 INPUT "WHAT IS THE WORD ":Z$
270 T=T+1
271 PRINT T
290 IF Z$=L$ THEN 400
300 PRINT
310 PRINT "WRONG, TRY AGAIN"
320 W=W+1
330 GOTO 235
400 PRINT
410 PRINT "THAT IS CORRECT"
420 C=C+1
430 PRINT
440 PRINT
445 PRINT "WANT TO GO FOR IT AGAIN ?"
450 PRINT
455 PRINT "YES, PRESS Y"
460 PRINT "NO,  PRESS N"
465 CALL KEY(0,Z,X)
470 IF X=0 THEN 465
475 IF Z=89 THEN 20
480 IF Z=78 THEN 9500
485 PRINT "PLEASE PRESS ONLY Y OR N"
490 GOTO 465
500 L$="EGG"
600 X$="GEG"
700 GOTO 235
1000 L$="LOG"
1100 X$="GLO"
```

```
1200 GOTO 235
1500 L$="BEE"
1600 X$="EBE"
1700 GOTO 235
2000 L$="TRY"
2100 X$="RYT"
2200 GOTO 235
2500 L$="RADIO"
2600 X$="DIROA"
2700 GOTO 235
3000 L$="COURT"
3100 X$="RUCOT"
3200 GOTO 235
3500 L$="DREAM"
3600 X$="RAMED"
3700 GOTO 235
4000 L$="LIVER"
4100 X$="RIVEL"
4200 GOTO 235
4500 L$="COMPUTE"
4600 X$="PEMCUTO"
4700 GOTO 235
5000 L$="MANSION"
5100 X$="SOMNNAI"
5200 GOTO 235
5500 L$="VEHICLE"
5600 X$="ELCHIVE"
5700 GOTO 235
6000 L$="ILLEGAL"
6100 X$="GALELIL"
6200 GOTO 235
8000 Z=INT(13*RND)
8010 IF Z<9 THEN 8000
8020 IF Z>12 THEN 8000
8030 GOTO 200
8500 Z=INT(9*RND)
8510 IF Z<5 THEN 8500
8520 IF Z>8 THEN 8500
8530 GOTO 200
9000 Z=INT(5*RND)
9010 IF Z<1 THEN 9000
9020 IF Z>4 THEN 9000
```

```
9030 GOTO 200
9500 PRINT
9510 PRINT "OKAY"
9520 PRINT "~~~~~~~~~~~~~~~~~~~~"
9530 PRINT "YOU HAD ";C;" RIGHT"
9540 PRINT "AND ";W;" WRONG"
9550 PRINT "OUT OF ";T;" TRIES"
9560 BA=INT(1000*(C/T))
9570 PRINT
9580 PRINT "YOU ARE BATTING ";BA
9590 PRINT
9600 FOR T=1 TO 1000
9610 NEXT T
9620 PRINT
9630 PRINT "PRESS THE SPACE BAR"
9640 PRINT "TO GO AROUND AGAIN"
9650 CALL KEY(0,Z,X)
9660 IF X=0 THEN 9650
9670 GOTO 10
10000 Y$="HARD"
10010 GOTO 210
10500 Y$="HARDER"
10510 GOTO 210
11000 Y$="HARDEST"
11010 GOTO 210
```

Old West Shootout

You are Marshall Matt Dillon. Billy the Kid is in town. You can't avoid your duty: the kid must be arrested. It's high noon!

You must plug the gunfighter before he guns you down. But where is he hiding? He could be down in the corral or up on the hotel roof. He might have slipped into the stable or down behind the bar in the saloon. He could be inside the house or outside in the wagon. He might be behind the railroad station or in the doctor's office. And, worst of all, he may have brought a friend!

Follow the clues from your handy computer, fastest figurer in the West. Just don't stop any bullets.

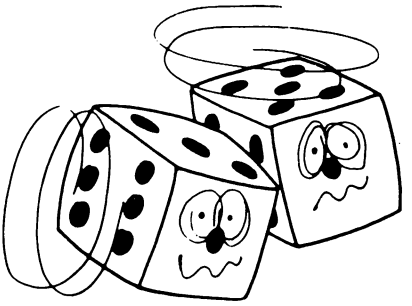
Program Listing

```
10 GOSUB 2000
12 RANDOMIZE
13 P=0
14 M=0
15 Z=0
16 O=0
17 W=0
20 A$="CORRAL"
25 B$="HOTEL"
30 C$="STABLE"
35 D$="SALOON"
40 E$="HOUSE"
```

```
45 F$="WAGON"
50 G$="STATION"
55 H$="STORE"
60 I$="OFFICE"
70 PRINT
75 PRINT
85 PRINT "SHOOT THE GUNFIGHTER"
90 PRINT "BEFORE HE SHOOTS YOU"
95 PRINT
100 PRINT "HE MAY BE IN THE..."
105 PRINT
110 PRINT A$,B$,C$,D$,E$,F$,G$,H$,I$
115 PRINT
120 INPUT "BUT WHERE ?";K$
125 PRINT
130 INPUT "WHERE ARE YOU ?";L$
135 PRINT
140 PRINT
145 PRINT "YOU ARE SHOOTING"
150 PRINT "FROM THE ";L$
155 PRINT "INTO THE ";K$
170 GOSUB 1000
180 PRINT
185 PRINT
190 PRINT "**  BANG  **"
195 PRINT
200 PRINT
205 IF K$=Z$ THEN 300
210 IF L$=Z$ THEN 600
215 PRINT "YOU MISSED HIM"
220 P=P+1
225 W=W+1
230 Z=Z+1
240 IF W>2 THEN 700
245 V=S
250 PRINT
255 PRINT "TRY AGAIN"
260 GOTO 95
300 PRINT
305 PRINT "YOU GOT HIM",,"IN THE ";Z$
310 M=M+1
315 PRINT
```

```
320 PRINT
325 PRINT "OOPS, ANOTHER BAD GUY"
330 PRINT
335 INPUT "WANT TO FIGHT AGAIN ?";N$
340 PRINT
345 PRINT
355 IF N$="YES" THEN 70
356 IF N$="NO" THEN 360
357 PRINT "PLEASE ANSWER YES OR NO"
358 GOTO 330
360 PRINT
365 PRINT "YOU MISSED ";P;" SHOTS"
370 PRINT
375 PRINT "YOU WON ";M;" AND LOST ";O
380 END
600 PRINT
605 PRINT "OOPS !"
610 PRINT "HE IS IN THE ";L$;" ALSO"
615 PRINT
620 PRINT "HE SHOT YOU"
625 O=O+1
630 GOTO 315
700 PRINT
705 PRINT "HE GOT YOU"
710 PRINT "YOU ARE DEAD"
715 PRINT
720 O=O+1
725 PRINT "HE WAS IN THE ";Z$
730 GOTO 315
1000 S=INT(10*RND)
1010 IF S<1 THEN 1000
1020 IF S>9 THEN 1000
1030 ON S GOTO 1100,1200,1300,1400,
     1500,1600,1700,1800,1900
1100 Z$=A$
1110 RETURN
1200 Z$=B$
1210 RETURN
1300 Z$=C$
1310 RETURN
1400 Z$=D$
```

```
1410 RETURN
1500 Z$=E$
1510 RETURN
1600 Z$=F$
1610 RETURN
1700 Z$=G$
1710 RETURN
1800 Z$=H$
1810 RETURN
1900 Z$=I$
1910 RETURN
2000 CALL CLEAR
2010 PRINT "======================"
2020 PRINT "= OLD WEST SHOOTOUT ="
2030 PRINT "======================"
2040 PRINT
2050 PRINT
2060 RETURN
```



Craps

The world's oldest game transformed into a futuristic setting: computer dice. The computer rolls the dice, notes your point, cheers your wins and commiserates after your losses.

Snake eyes. Lucky seven. The roll. The point. Just be sure not to crap out!

Program Listing

```
10 CALL CLEAR
15 RANDOMIZE
20 C=0
25 Z=0
30 IF Q=1 THEN 80
35 PRINT TAB(9);"**********"
40 PRINT TAB(9);"* CRAPS *"
45 PRINT TAB(9);"**********"
50 PRINT
55 PRINT
60 PRINT
65 PRINT "PRESS SPACE BAR TO ROLL DICE"
70 CALL KEY(0,Z,X)
75 IF X=0 THEN 70
80 GOSUB 600
100 C=C+1
110 CALL CLEAR
120 PRINT TAB(9);"***** *****"
130 PRINT TAB(9);"*";X;"* *";Y;"*"
140 PRINT TAB(9);"***** *****"
145 PRINT
```

```
150 Z=X+Y
160 IF C=1 THEN 166
164 GOTO 170
166 B=Z
170 IF C=1 THEN 190
180 IF Z=B THEN 400
190 IF Z=7 THEN 250
200 IF Z=2 THEN 300
205 PRINT
210 PRINT TAB(7);"YOUR POINT IS";B
220 GOTO 50
250 IF C=1 THEN 252
251 GOTO 270
252 PRINT TAB(5);"HOORAY, LUCKY SEVEN"
257 PRINT TAB(10);"YOU WIN"
260 D=D+1
265 GOTO 500
270 PRINT "TOUGH LUCK, YOU CRAPPED OUT"
275 PRINT TAB(10);"YOU LOSE"
280 E=E+1
285 GOTO 500
300 PRINT TAB(5);"SORRY, SNAKE EYES"
310 GOTO 275
400 PRINT
405 PRINT TAB(8);">>> POINT <<<"
410 PRINT
415 PRINT TAB(10);"YOU GOT";B
420 PRINT
425 PRINT TAB(11);"YOU WIN"
430 D=D+1
500 PRINT
510 PRINT TAB(5);"YOU ROLLED";C;"TIMES"
520 PRINT
525 Q=1
530 PRINT TAB(4);"WANT TO ROLL AGAIN ?"
535 PRINT
540 PRINT "PRESS Y FOR YES OR N FOR NO"
545 CALL KEY(0,Z,X)
550 IF X=0 THEN 545
555 IF Z=89 THEN 20
560 IF Z=78 THEN 570
565 GOTO 545
```

```
570 PRINT
575 PRINT TAB(12);"OKAY"
580 PRINT TAB(4);"YOU WON";D;"AND LOST";E
590 END
600 X=INT(7*RND)
610 IF X<1 THEN 600
620 IF X>6 THEN 600
630 Y=INT(7*RND)
640 IF Y<1 THEN 630
650 IF Y>6 THEN 630
660 RETURN
```

Decision Maker

Stumped by a toughie? Got one too hot to handle alone? Need help with major decisions? When there is no other way to decide, punch up this executive decision maker and get the answer: YES or NO. In 200 sample runs we produced 107 YES and 93 NO answers.

Program Listing

```
10 CALL CLEAR
15 RANDOMIZE
20 X=100*RND
30 IF X>49 THEN 60
40 PRINT "NO"
50 END
60 PRINT "YES"
70 END
```

Program Listing

```
10 RANDOMIZE
20 CALL CLEAR
30 R=INT(1000*RND)
40 IF R>499 THEN 70
50 PRINT "NO"
60 GOTO 80
70 PRINT "YES"
80 FOR L=1 TO 10
90 PRINT
```

```
100 NEXT L
110 PRINT "TO MAKE ANOTHER"
120 PRINT "IMPORTANT DECISION,"
130 INPUT "PRESS 'ENTER' ":KY$
140 R=0
150 GOTO 20
```

In this superior edition, a choice of replies is possible.

Program Listing

```
10 DATA FIRE SOMEONE
20 DATA PASS THE BUCK
30 DATA YES
40 DATA MAYBE
50 DATA REORGANIZE
60 DATA SIT ON IT
70 DATA NO
80 DATA SEE YOUR ANALYST
90 RANDOMIZE
100 CALL CLEAR
110 N=INT(9*RND)
120 IF N<1 THEN 110
130 FOR L=1 TO N
140 READ DM$
150 NEXT L
160 PRINT DM$
170 CALL KEY(0,Z,X)
180 IF X=0 THEN 170
190 RESTORE
200 GOTO 100
```

Buried Treasure

The sun burns the beach sand as it glares across mirrored depths. An old salt, one leg gone below the knee, stumps down to the water's edge and glares back. A parrot chatters on his shoulder. The old man tosses a bottle into the ocean.

Hours later you awaken to find the tide moistening your toes and the bottle bumping against your leg. It's got paper inside.

Pulling the cork you find a map. A treasure map! The scrawl shows a quiet Cay with a peaceful finger of land extending into the sea. On the map is a giant X, marking the spot where the treasure is buried. Then, the only remaining question is: Where?

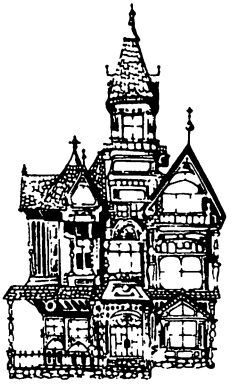
Program Listing

```
10 CALL CLEAR
15 PRINT TAB(4);"********************"
20 PRINT TAB(4);"* BURIED TREASURE *"
25 PRINT TAB(4);"********************"
30 PRINT
35 PRINT
40 PRINT
45 PRINT
50 PRINT TAB(3);"PRESS SPACE BAR TO PLAY"
55 RANDOMIZE
60 W=0
65 T=0
70 CALL KEY(0,Z,X)
75 IF X=0 THEN 70
```

```
80 X=INT(7*RND)
85 IF X<1 THEN 80
90 IF X>6 THEN 80
100 CALL CLEAR
110 PRINT TAB(11);"*   *"
120 PRINT TAB(11);" * *"
130 PRINT TAB(11);"  *"
140 PRINT TAB(11);" * *"
150 PRINT TAB(11);"*   *"
160 PRINT
165 PRINT
170 PRINT "ON YOUR MAP, X MARKS A SPOT"
180 PRINT
190 GOTO 950
200 PRINT
220 INPUT "IN THE GARDEN ?":D$
225 T=T+1
230 IF D$="YES" THEN 400
240 PRINT
245 INPUT "SUNK IN THE POND ?":F$
247 T=T+1
250 IF F$="YES" THEN 500
260 PRINT
265 INPUT "BESIDE THE TREE ?":H$
267 T=T+1
270 IF H$="YES" THEN 600
280 PRINT
285 INPUT "BENEATH THE BOULDER ?":I$
287 T=T+1
290 IF I$="YES" THEN 700
300 PRINT
305 INPUT "INSIDE THE CAVE ?":J$
307 T=T+1
310 IF J$="YES" THEN 800
320 PRINT
325 INPUT "UNDER THE SHED ?":K$
327 T=T+1
330 IF K$="YES" THEN 900
340 PRINT
345 GOTO 950
400 IF X=1 THEN 980
410 GOSUB 1000
```

```
420 GOTO 240
500 IF X=2 THEN 980
510 GOSUB 1000
520 GOTO 260
600 IF X=3 THEN 980
610 GOSUB 1000
620 GOTO 280
700 IF X=4 THEN 980
710 GOSUB 1000
720 GOTO 300
800 IF X=5 THEN 980
810 GOSUB 1000
820 GOTO 320
900 IF X=6 THEN 980
910 GOSUB 1000
920 GOTO 200
950 PRINT
952 PRINT "THE MISSING TREASURE IS..."
955 PRINT "IN THE GARDEN"
957 PRINT "SUNK IN THE POND"
960 PRINT "BESIDE THE TREE"
962 PRINT "BENEATH THE BOULDER"
965 PRINT "INSIDE THE CAVE"
967 PRINT "OR UNDER THE SHED"
970 PRINT
975 GOTO 200
980 PRINT
982 PRINT
985 PRINT ">>> YOU FOUND THE CHEST <<<"
987 PRINT
989 PRINT "IT CONTAINS JEWELS"
990 PRINT "WORTH $1-MILLION"
991 PRINT
993 PRINT
995 PRINT "YOU HAD";W;"WRONG"
996 PRINT "OUT OF";T;"TRIES"
997 PRINT "AND THAT'S NOT TOO BAD"
999 GOTO 1100
1000 PRINT
1010 PRINT "NO, NOT THERE"
1020 PRINT "TRY AGAIN"
1030 PRINT
```

```
1040 W=W+1
1050 RETURN
1100 PRINT
1110 PRINT
1120 PRINT "PRESS P TO PLAY AGAIN"
1130 PRINT "PRESS Q TO QUIT"
1140 CALL KEY(0,Z,X)
1150 IF X=0 THEN 1140
1160 IF Z=80 THEN 10
1170 IF Z=81 THEN 1190
1180 GOTO 1110
1190 END
```



Murder In the Mansion

The wind howls around gnarled tree trunks and through heather across the moor. A dog barks in the distance. Inside the stately Victorian mansion, the upstairs maid weeps noisily into her handkerchief. The Baron has just been found dead in a pool of blood.

As Scotland Yard's chief inspector for the district, you've just been called in on the case. Besides the Pretty Maid, you find a motley cast of characters including the Stately Butler and the Old Nanny,

The case is perplexing. You're not sure how the old boy was done in, or even where he actually was killed. The identity of the killer is not immediately apparent.

The first major decision comes as you sort through the clues, trying to deduce where the Baron was killed. Satisfying that one, you search for the weapon. Once you know where and how he was murdered, the only remaining question is: Whodunit?

Program Listing

```
10 CALL CLEAR
20 A$="BUTLER"
30 B$="MAID"
40 C$="NANNY"
60 PRINT "IT'S A COLD WINTER EVE"
70 PRINT "AT A LONELY COUNTRY MANSION"
80 PRINT "AND THE BARON IS DEAD"
```

```
90 PRINT "**************************"
94 GOSUB 950
96 GOSUB 900
100 PRINT "OUR CAST..."
105 PRINT
110 PRINT "THE STATELY ";A$
120 PRINT "THE PRETTY ";B$
130 PRINT "AND THE OLD ";C$
150 E$="HAIRPIN"
160 F$="GUN"
170 G$="POKER"
190 I$="PANTRY"
200 J$="BEDROOM"
210 K$="LIBRARY"
230 RANDOMIZE
240 M=INT(3*RND)+1
260 N=INT(3*RND)+1
280 R=INT(3*RND)+1
300 GOSUB 950
330 PRINT "PRESS THE SPACE BAR TO PLAY"
340 CALL KEY(0,Z,X)
345 IF X=0 THEN 340
350 CALL CLEAR
360 PRINT "IN WHICH ROOM..."
370 PRINT
380 PRINT I$,,J$,,K$
390 PRINT
400 PRINT "WAS THE FOUL DEED DONE"
405 INPUT V$
410 P=P+1
430 IF M=1 THEN 435
432 GOTO 440
435 S$=I$
440 IF M=2 THEN 445
442 GOTO 450
445 S$=J$
450 IF M=3 THEN 455
452 GOTO 460
455 S$=K$
460 IF V$=S$ THEN 530
475 PRINT
480 PRINT "HERE IS A CLUE..."
```

```
685 PRINT ">>> BULLETS <<<"
690 IF T$=G$ THEN 695
692 GOTO 700
695 PRINT ">>> LOGS <<<"
700 GOTO 560
720 PRINT
725 PRINT
730 PRINT "THE ";T$;" IS CORRECT"
735 PRINT
740 PRINT "BUT WHO KNOCKED OFF THE
          OLD BOY ?"
745 PRINT
750 PRINT A$,,B$,,C$
755 PRINT
760 INPUT "WHODUNIT ?";X$
765 P=P+1
770 IF R=1 THEN 775
772 GOTO 780
775 U$=A$
780 IF R=2 THEN 785
782 GOTO 790
785 U$=B$
790 IF R=3 THEN 795
792 GOTO 800
795 U$=C$
800 PRINT
810 IF X$=U$ THEN 865
815 PRINT "HERE IS A CLUE..."
817 PRINT
820 IF U$=A$ THEN 825
822 GOTO 830
825 PRINT ">>> HE SERVES <<<"
830 IF U$=B$ THEN 835
832 GOTO 840
835 PRINT ">>> SHE DUSTS <<<"
840 IF U$=C$ THEN 845
842 GOTO 850
845 PRINT ">>> SHE LOVES KIDS <<<"
850 PRINT
860 GOTO 745
865 GOSUB 950
867 GOSUB 950
```

```
485 PRINT
490 IF S$=I$ THEN 493
492 GOTO 495
493 PRINT ">>> FOOD <<<"
495 IF S$=J$ THEN 498
497 GOTO 500
498 PRINT ">>> PILLOW <<<"
500 IF S$=K$ THEN 503
502 GOTO 505
503 PRINT ">>> BOOKS <<<"
505 PRINT
510 PRINT
520 GOTO 360
530 PRINT
535 PRINT
540 PRINT "THAT IS CORRECT"
545 PRINT "IT WAS DONE IN THE ";V$
550 PRINT
555 PRINT "BUT...WITH WHICH WEAPON ?"
560 PRINT
570 PRINT E$,,F$,,G$
580 PRINT
610 INPUT "WHICH ?";W$
615 P=P+1
620 IF N=1 THEN 625
622 GOTO 630
625 T$=E$
630 IF N=2 THEN 635
632 GOTO 640
635 T$=F$
640 IF N=3 THEN 645
642 GOTO 650
645 T$=G$
650 PRINT
660 IF W$=T$ THEN 720
665 PRINT "HERE IS A CLUE..."
670 PRINT
675 IF T$=E$ THEN 678
677 GOTO 680
678 PRINT ">>> COIFFURE <<<"
680 IF T$=F$ THEN 685
682 GOTO 690
```

```
870 PRINT "HOORAY !"
875 PRINT "YOU SOLVED THE CRIME"
877 PRINT "IN ONLY";P;"TRIES"
880 PRINT
890 PRINT "THE ";U$;" DID IT"
892 PRINT "IN THE ";S$
895 PRINT "WITH THE ";T$
897 GOTO 1000
900 FOR DELAY=1 TO 500
910 NEXT DELAY
920 RETURN
950 FOR SCROLL=1 TO 5
960 PRINT
970 NEXT SCROLL
980 RETURN
1000 GOSUB 950
1010 PRINT "TO PLAY ANOTHER ROUND,"
1020 PRINT "PRESS THE SPACE BAR"
1030 PRINT
1040 PRINT "TO QUIT, PRESS Q"
1050 P=0
1060 CALL KEY(0,Z,X)
1070 IF X=0 THEN 1060
1080 IF Z=32 THEN 10
1090 IF Z=81 THEN 1100
1095 GOTO 1060
1100 CALL CLEAR
1110 PRINT "OKAY, BYE BYE"
1120 END
```

Wood Chuck Chuck

How much wood would a woodchuck chuck, if a woodchuck could chuck wood. How much wood could a woodchuck chuck, if a woodchuck would chuck wood? That's like asking how many angels can sit on the head of a pin. Or, more appropriately, how many trees in the forest.

But, wait. This little game takes that old ditty seriously. How much wood could Mr. Chuck throw around if he wanted to? Try it. If you're good enough, you'll end up in the Woodchuck Hall of Fame.

Program Listing

```
10 CALL CLEAR
15 PRINT "HOW MUCH WOOD,"
20 PRINT "COULD A WOODCHUCK CHUCK,"
25 PRINT "IF A WOODCHUCK"
30 PRINT "COULD CHUCK WOOD ?"
35 PRINT "**********************"
40 FOR SCROLL=1 TO 4
45 PRINT
50 NEXT SCROLL
55 PRINT "TOO MUCH !"
60 C=0
65 E=0
70 G=0
```

```
75 FOR SCROLL=1 TO 9
80 PRINT
85 NEXT SCROLL
90 PRINT "PRESS THE SPACE BAR TO PLAY"
95 CALL KEY(0,Z,X)
100 IF X=0 THEN 95
105 GOSUB 1000
110 CALL CLEAR
115 PRINT "HOW MANY LOGS (1 TO 10)"
120 INPUT "CAN THE WOODCHUCK CHUCK ?":B
125 C=C+1
130 IF B<>X THEN 400
135 G=G+1
137 PRINT
140 PRINT "HOORAY !"
145 PRINT "YOU GOT IT RIGHT"
150 PRINT
155 IF C=1 THEN 157
156 GOTO 160
157 PRINT "ON THE FIRST TRY"
158 GOTO 165
160 PRINT "IN";C;"TRIES"
165 PRINT
260 E=E+1
265 C=0
270 PRINT "WANT TO PLAY AGAIN ?"
280 INPUT D$
285 IF D$="Y" THEN 105
290 IF D$="YES" THEN 105
300 GOTO 800
400 IF C=1 THEN 424
405 IF C=2 THEN 439
410 IF C=3 THEN 454
415 IF C=4 THEN 469
420 IF C>4 THEN 499
424 PRINT
425 PRINT "YOUR FIRST TRY IS"
430 IF B<X THEN 480
435 GOTO 490
439 PRINT
440 PRINT "YOUR SECOND GUESS IS"
445 IF B<X THEN 480
```

```
450 GOTO 490
454 PRINT
455 PRINT "THIRD GUESS"
460 IF B<X THEN 480
465 GOTO 490
469 PRINT
470 PRINT "FOURTH TRY"
472 PRINT "YOUR LAST CHANCE"
475 IF B<X THEN 600
477 GOTO 630
480 PRINT
481 PRINT "TOO LITTLE"
485 GOTO 495
490 PRINT
491 PRINT "TOO MUCH"
495 PRINT "TRY AGAIN"
496 PRINT
497 GOTO 115
499 PRINT
500 PRINT "SORRY !"
502 PRINT "YOU ONLY GET 4 CHANCES"
503 PRINT
505 PRINT "THE WOODCHUCK COULD"
510 PRINT "CHUCK";X;"LOGS"
515 PRINT
520 PRINT "YOU LOSE"
525 PRINT "TOUGH LUCK"
530 PRINT
540 GOTO 260
600 PRINT "TOO LITTLE AGAIN"
610 GOTO 500
630 PRINT "STILL TOO HIGH"
640 GOTO 500
800 CALL CLEAR
805 PRINT "YOU HAD";G;"RIGHT"
810 PRINT "IN";E;"TRIES"
815 H=INT((G/E)*1000)
820 PRINT
830 PRINT "YOU ARE BATTING";H
900 END
1000 RANDOMIZE
1010 X=INT(10*RND)+1
1020 RETURN
```

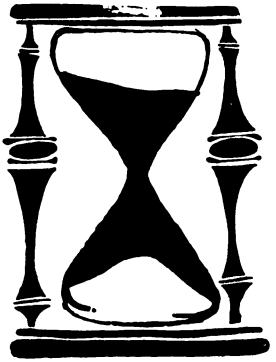
Fractured Descriptions

John's as sharp as a tack. Judy is as pretty as a picture. Fred's as dumb as an ox. This handy-dandy people describer provides hours of fun as it continually thinks up new and different ways to insult, flatter, affront, praise, cut, compliment your friends, relatives, even your boss!

Program Listing

```
10 CALL CLEAR
20 DIM M$(10)
30 DIM N$(10)
40 RANDOMIZE
100 M$(1)="FAT"
110 M$(2)="DIRTY"
120 M$(3)="BAD"
130 M$(4)="SAD"
140 M$(5)="GREEN"
150 M$(6)="UGLY"
160 M$(7)="DULL"
170 M$(8)="TACKY"
180 M$(9)="WEAK"
190 M$(10)="DUMB"
200 N$(1)="A TREE"
210 N$(2)="A PIG"
220 N$(3)="A TURKEY"
230 N$(4)="A DOG"
240 N$(5)="A ROOKIE"
```

```
250 N$(6)="SIN"
260 N$(7)="A FIRE PLUG"
270 N$(8)="A BULL"
280 N$(9)="A WORM"
290 N$(10)="AN OX"
300 INPUT "WHOM ARE WE DESCRIBING ?":B$
320 CALL CLEAR
330 T=INT(11*RND)
340 IF T<1 THEN 330
350 Q=INT(11*RND)
360 IF Q<1 THEN 350
370 PRINT B$;" IS ";M$(T);" AS ";N$(T)
380 FOR TM=1 TO 300
390 NEXT TM
400 PRINT
410 GOTO 330
```



Parameters

What! Another high-low numbers game? Yep. It's the all-time most favorite computer game.

Here it is. Where everybody started in micro-computer programming back in the Seventies. The first game ever played was a high-low guess-the-number routine.

Any rules? Sure. The computer picks a secret number. You try to guess it. The computer gives you too-high or too-low clues and keeps score.

Here's how it works: the secret number can be zero to 1000. Line 100 generates a random number (the secret number) and stores it. Line 200 asks you to guess the number.

Lines 300-310 decide if you are right or wrong. Line 220 keeps track of the number of attempts.

Program Listing

```
10 RANDOMIZE
20 CALL CLEAR
30 T=0
100 R=INT(1001*RND)
200 INPUT "GUESS THE NUMBER ":B
210 PRINT
220 T=T+1
230 PRINT "THAT WAS TRY NUMBER ";T
```

```
300 IF B>R THEN 350
310 IF B<R THEN 330
320 GOTO 400
330 PRINT "TOO LOW"
340 GOTO 360
350 PRINT "TOO HIGH"
360 INPUT "GUESS AGAIN ":B
370 GOTO 210
400 CALL SOUND(99,440,1)
410 PRINT "YES, YOU GOT IT !"
420 PRINT R;" IS THE NUMBER"
430 PRINT "YOU GOT IT IN ";T;" TRIES"
440 PRINT
450 PRINT
460 PRINT
470 GOTO 30
```

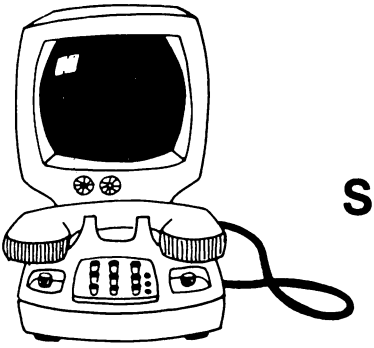
The possible numbers here range from zero to 100.

Program Listing

```
10 CALL CLEAR
20 RANDOMIZE
30 Q$="*"
40 GOTO 190
50 N=INT(101*RND)
60 INPUT "GUESS MY SECRET NUMBER?  ":G
70 IF G>N THEN 90
80 GOTO 120
90 PRINT "TOO HIGH"
100 PRINT
110 GOTO 60
120 IF G<N THEN 140
130 GOTO 160
140 PRINT "TOO LOW"
150 GOTO 100
160 PRINT "RIGHT !"
170 PRINT
180 PRINT
190 FOR L=1 TO 23
200 PRINT Q$;
210 NEXT L
220 GOTO 50
```

Sample Run

```
**********GUESS MY SECRET NUMBER?    37
TOO LOW
GUESS MY SECRET NUMBER?    67
TOO HIGH
GUESS MY SECRET NUMBER?    47
TOO LOW
GUESS MY SECRET NUMBER?    57
TOO HIGH
GUESS MY SECRET NUMBER?    53
TOO LOW
GUESS MY SECRET NUMBER?    55
TOO HIGH
GUESS MY SECRET NUMBER?    54
RIGHT !
```



Smart Computer

This game is so quick you can work it in while your secretary is away sharpening her pencil. It's more or less the reverse of the old favorite High-Low Number bit. In this rendition, you come up with the secret three-digit number and the computer guesses it!

In old-fashioned High-Low, the computer could keep you guessing for hours. Here, the computer asks one little old question and...*bingo!* It has the correct answer in an instant.

By the way, this program can make you look like the company genius at the next office party. Ask your friend to select any three-digit number in which all three digits are the same. Then have him tell the computer only the *sum* of those three digits.

The computer will identify his secret number!

Program Listing

```
10 CALL CLEAR
20 PRINT "SELECT A THREE-DIGIT NUMBER"
30 PRINT "ALL THREE DIGITS THE SAME"
40 PRINT
50 PRINT "ADD THE DIGITS TOGETHER"
60 PRINT
70 PRINT "WHAT IS THE SUM"
80 INPUT "OF THE THREE DIGITS? ":N
90 IF N<3 THEN 80
100 IF N>27 THEN 80
110 Q=37*N
```

```
120 PRINT
130 PRINT
140 CALL SOUND(100,1000,1)
150 PRINT "YOUR NUMBER IS ";Q
160 PRINT
170 PRINT
180 GOTO 20
```

Coin Toss

Here's a handy way to settle arguments. Toss a coin. Only this time, let the computer do the work!

Type in the program. Run it. The computer will report *heads* or *tails* after each toss.

For a new toss, press the ENTER key on your computer's keyboard.

Line 10 clears the screen. A random number—either zero or one—is generated at line 20 and tested to see if it is a zero. If it is, the computer prints *heads*. If not, the computer drops to line 30 where it prints *tails.* Lines 50, 60 and 70 accomplish the restart when you press ENTER.

Program Listing

```
10 CALL CLEAR
15 RANDOMIZE
20 IF INT(3*RND)<1 THEN 100
30 PRINT "TAILS"
40 PRINT
45 PRINT
50 INPUT "FOR MORE, PRESS ENTER":KY$
60 CALL CLEAR
70 GOTO 20
100 PRINT "HEADS"
110 GOTO 40
```

Memory Tester II

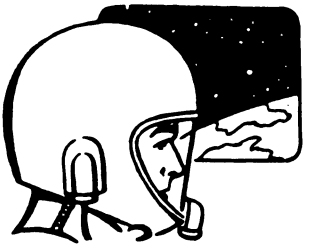
Suppose I pick a number out of the air. Say, 5. You can remember that, right? Or 73. Or 841. But, just how big a number can you see briefly and remember? This program throws ever-increasingly-larger random numbers at you and asks you to remember them. And it keeps score. What's your memory's upper limit?

Program Listing

```
10 CALL CLEAR
15 W=0
20 R=0
25 Z=1
27 RANDOMIZE
30 S=INT(100*RND)
35 N=INT(S*Z)
36 FOR SR=1 TO 5
37 PRINT
38 NEXT SR
40 PRINT "REMEMBER THIS NUMBER..."
45 PRINT
50 PRINT TAB(12);N
55 GOSUB 300
65 CALL CLEAR
70 IF W=3 THEN 75
72 GOTO 80
75 PRINT
77 PRINT ">>> FORGET IT <<<"
80 IF W=3 THEN 160
```

```
85 PRINT
90 INPUT "WHAT WAS THAT NUMBER ?":S
100 IF S<>N THEN 105
102 GOTO 110
105 PRINT
107 PRINT "WRONG"
110 IF S<>N THEN 115
112 GOTO 120
115 W=W+1
120 IF S<>N THEN 70
125 PRINT
127 PRINT "RIGHT"
130 R=R+1
135 W=0
140 Z=11*Z
145 PRINT
150 PRINT R;" RIGHT SO FAR"
152 GOSUB 300
155 GOTO 30
160 PRINT
165 PRINT "YOU HAD";R;"RIGHT"
167 GOSUB 300
170 PRINT
175 PRINT "LET'S START OVER"
180 GOSUB 300
182 GOSUB 300
185 FOR SR=1 TO 15
190 PRINT
195 NEXT SR
200 GOTO 15
300 FOR TM=1 TO 250
310 NEXT TM
320 RETURN
```

Klingon Killer



BLEEP. BLEEP. BLEEP. The warning alarm is screaming. A Klingon raider has been spotted. It is attacking. You swing your laser gun and fire. Will you kill him? Damage him? Miss him? If you miss, will he get you?

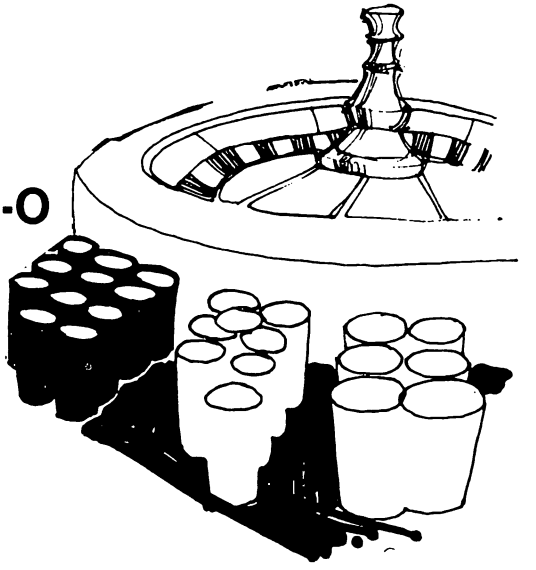
This is another in the series of quickie games, just the right length for keying into your Computer over lunch at your desk at work or in school. Beware: You're liable to become so excited you'll miss the end of your lunch hour!

Program Listing

```
10 CALL CLEAR
15 V=0
20 W=0
25 RANDOMIZE
30 PRINT "**********************"
35 PRINT "* RAIDERS ATTACKING *"
40 PRINT "**********************"
45 PRINT
50 PRINT
55 PRINT "STANDBY TO FIRE LASERS"
60 PRINT
65 INPUT "HOW MANY WILL YOU FIRE ?":Q
100 S=INT(6*RND)
110 IF S=1 THEN 200
120 IF S=2 THEN 300
130 IF S=3 THEN 400
140 IF S=4 THEN 500
150 IF S=5 THEN 600
```

```
160 GOTO 100
200 CALL CLEAR
210 PRINT "YOU DAMAGED HIM"
220 PRINT
230 GOTO 50
300 CALL CLEAR
310 PRINT "YOU MISSED"
320 PRINT
330 GOTO 220
400 CALL CLEAR
410 PRINT "YOU MISSED BUT"
420 PRINT "HE FIRED AT YOU"
430 PRINT
440 PRINT "HE MISSED"
450 GOTO 220
500 CALL CLEAR
510 PRINT "YOU GOT HIM"
520 PRINT
530 PRINT "HE IS DEAD IN SPACE"
540 W=W+1
550 GOTO 700
600 CALL CLEAR
610 PRINT "OH, NO,"
620 PRINT "HE GOT YOU"
630 PRINT
640 PRINT "EL ZAPPO"
650 PRINT
660 PRINT "FINIS"
670 V=V+1
700 PRINT
710 PRINT
720 PRINT "THE SCORE IS:"
725 PRINT
730 PRINT "KLINGONS";V;"YOU";W
740 FOR TM=1 TO 1000
750 NEXT TM
760 CALL CLEAR
770 GOTO 30
```

Super Slot-O



Oh, those evil slot machines! They're just popping up everywhere. Even inside my TI Computer.

As with all the programs used as examples in this book, simply type this one in and RUN it. The computer will display, on your video screen, the name of this program and some simple instructions.

Like any good slot machine, when you pull the handle it displays some objects. If you get no two alike, you lose. If you get two alike among the three objects, you win small. If all three are the same, you win big.

To simulate pulling the slot machine's lever arm, press the ENTER key on the keyboard.

One difference in our Slot-O game, the display is entirely at random. No one pushes a secret button under the table to make certain items pop up.

Get out your funny-money from that old Monopoly game, gather up your friends, and let's have some fun.

By the way, be very careful in typing in the program.

As you key in programs throughout this book, be sure you include all blank spaces where called for.

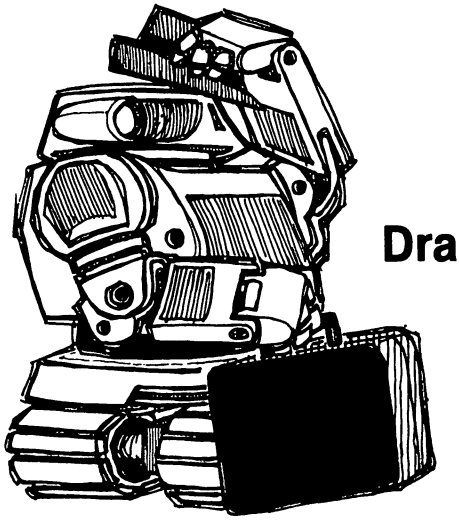
Program Listing

```
10 CALL CLEAR
20 GOSUB 500
30 PRINT
40 PRINT
50 PRINT
60 GOSUB 200
70 PRINT "***** ***** ***** *****"
80 PRINT "* ";A$;" * * ";B$;" * * "
   ;C$;" * * ";D$;" *"
90 PRINT "***** ***** ***** *****"
100 PRINT
105 PRINT
110 PRINT "TO PULL THE LEVER,"
120 INPUT "PRESS ENTER":KY$
130 GOTO 10
200 GOSUB 400
210 A$=CHR$(X)
220 GOSUB 400
230 B$=CHR$(X)
240 GOSUB 400
250 C$=CHR$(X)
260 GOSUB 400
270 D$=CHR$(X)
280 GOSUB 400
400 R=INT(5*RND)
410 IF R<1 THEN 400
420 IF R=1 THEN 800
430 IF R=2 THEN 900
440 IF R=3 THEN 1000
450 IF R=4 THEN 1100
460 RETURN
500 PRINT "**********************"
510 PRINT "* SUPER T.I. SLOT-O *"
520 PRINT "**********************"
530 RETURN
800 X=35
810 GOTO 460
900 X=36
910 GOTO 460
1000 X=37
```

```
1010 GOTO 460
1100 X=38
1110 GOTO 460
```

Sample Run

```
**********************
* SUPER T.I. SLOT-O *
**********************


***** ***** ***** *****
* $ * * # * * $ * * # *
***** ***** ***** *****


TO PULL THE LEVER,
PRESS ENTER


**********************
* SUPER T.I. SLOT-O *
**********************

***** ***** ***** *****
* # * * $ * * % * * & *
***** ***** ***** *****

TO PULL THE LEVER,
PRESS ENTER
```



Draw Straws

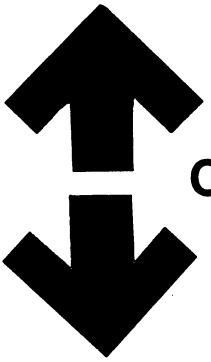
Here's one of man's oldest decision makers. Several straws are broken off to the same length except for one extra-short straw. The length of all straws is concealed and each person draws a straw. The person drawing the shortest straw "wins." That is, he is selected by the luck of the draw.

Now, your computer can provide a fast and easy drawing where no straws are available. It does all the work for you by assigning electronic straws randomly to each person. Those straws are numbers. The shortest straw, or lowest number, "wins."

Program Listing

```
10 CALL CLEAR
20 B=0
30 C=0
40 D=0
50 L=0
60 X=0
70 GOSUB 500
80 PRINT
90 PRINT "DRAW STRAWS"
100 GOSUB 500
110 PRINT
120 PRINT
130 INPUT "PLAYER NO. 1: ":B$
```

```
140 INPUT "PLAYER NO. 2: ":C$
150 INPUT "PLAYER NO. 3: ":D$
160 GOSUB 540
170 B=X
180 L=B
190 GOSUB 540
200 C=X
210 IF C<L THEN 230
220 GOTO 240
230 L=C
240 GOSUB 540
250 D=X
260 IF D<L THEN 280
270 GOTO 290
280 L=D
290 PRINT
300 PRINT
310 PRINT B$;": ";B;
320 IF L=B THEN 350
330 PRINT
340 GOTO 360
350 PRINT " <<<<<"
360 PRINT C$;": ";C;
370 IF L=C THEN 400
380 PRINT
390 GOTO 410
400 PRINT " <<<<<"
410 PRINT D$;": ";D;
420 IF L=D THEN 450
430 PRINT
440 GOTO 460
450 PRINT " <<<<<"
460 PRINT
470 PRINT
480 INPUT "FOR MORE, PRESS ENTER":KY$
490 GOTO 10
500 FOR L=1 TO 11
510 PRINT "*";
520 NEXT L
530 RETURN
540 X=INT(100*RND)
550 RETURN
```



Original Hi/Lo Game

Here it is. Where everybody started in microcomputer programming back in the Seventies. The first game ever played was a high-low guess-the-number routine.

The computer selects a secret number. You try to guess it. The computer tells you whether or not you are too high, too low, or right on the number.

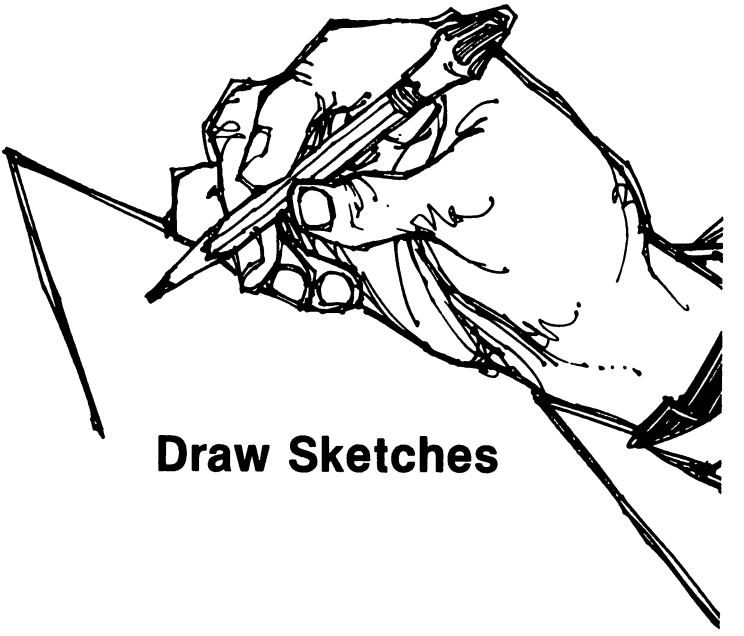
Here's how it works: the secret number can be zero to 999. Line 100 generates a random number (the secret number) and stores it. Line 210 asks you to guess the number.

Lines 300-310 decide if you are right or wrong. Line 230 keeps track of the number of attempts.

Program Listing

```
10 CALL CLEAR
20 T=0
30 RANDOMIZE
100 R=INT(1000*RND)
200 PRINT "GUESS THE SECRET NUMBER "
210 INPUT B
220 CALL CLEAR
230 T=T+1
240 PRINT "THAT WAS TRY NUMBER";T
300 IF B>R THEN 400
310 IF B<R THEN 500
320 IF B=R THEN 600
400 PRINT
```

```
410 PRINT B;"IS TOO HIGH"
420 PRINT " GUESS AGAIN"
430 PRINT
440 GOTO 200
500 PRINT
510 PRINT B;"IS TOO LOW"
520 GOTO 420
600 PRINT
610 PRINT "********************"
620 PRINT R;"IS THE NUMBER"
630 PRINT "********************"
640 PRINT
650 PRINT "YOU GOT";R;"IN";T;"TRIES"
660 FOR SR=1 TO 10
670 PRINT
680 NEXT SR
690 PRINT "PRESS ANY KEY TO PLAY AGAIN"
700 CALL KEY(0,Z,X)
710 IF X=0 THEN 700
720 GOTO 10
```



Draw Sketches

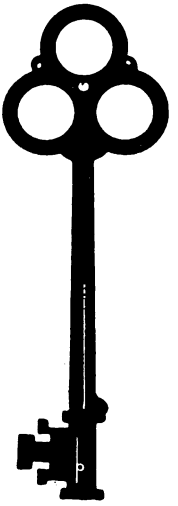
Now you can draw lines, rules, diagrams, maps, charts, boxes—anything you can imagine—on the face of your color TV set. Use the Computer keyboard as your pen and its video output as your ink.

Lines 50 to 390 accept your up, down, right, or left commands, as U, D, R, or L. No other letters will work. Line 400 draws your lines.

Program Listing

```
10 CALL CLEAR
20 CALL CHAR(128,"FFFFFFFFFFFFFFFF")
30 R=1
40 C=1
50 CALL KEY(0,Z,X)
60 IF X=0 THEN 50
70 IF Z=85 THEN 90
80 GOTO 150
90 R=R-1
100 IF R<1 THEN 120
110 GOTO 140
```

```
120 R=1
130 GOTO 50
140 GOTO 400
150 IF Z=68 THEN 170
160 GOTO 230
170 R=R+1
180 IF R>24 THEN 200
190 GOTO 220
200 R=24
210 GOTO 50
220 GOTO 400
230 IF Z=82 THEN 250
240 GOTO 310
250 C=C+1
260 IF C>32 THEN 280
270 GOTO 300
280 C=32
290 GOTO 50
300 GOTO 400
310 IF Z=76 THEN 330
320 GOTO 390
330 C=C-1
340 IF C<1 THEN 360
350 GOTO 380
360 C=1
370 GOTO 50
380 GOTO 400
390 GOTO 50
400 CALL HCHAR(R,C,128)
410 GOTO 50
```



Whodunit?

The lord of the manor has been found murdered. The butler, the gardener, the nanny all seem guilty. And a burglar was on the scene. Whodunit?

This is a fast-loading game which can be keyed quickly into your Computer. This game will provide tons of fun in those spare moments at your work or school desk.

Program Listing

```
10 GOSUB 700
15 A$="CAT BURGLAR"
20 B$="GARDENER"
25 C$="NANNY"
30 D$="BUTLER"
35 E$="SON"
40 F$="DAUGHTER"
45 G$="DUTCHESS"
50 H$="DUKE"
55 W=0
60 R=0
65 RANDOMIZE
100 S=INT(8*RND)+1
110 IF S=1 THEN 115
```

```
112 GOTO 120
115 X$=A$
120 IF S=2 THEN 125
122 GOTO 130
125 X$=B$
130 IF S=3 THEN 135
132 GOTO 140
135 X$=C$
140 IF S=4 THEN 145
142 GOTO 150
145 X$=D$
150 IF S=5 THEN 155
152 GOTO 160
155 X$=E$
160 IF S=6 THEN 165
162 GOTO 170
165 X$=F$
170 IF S=7 THEN 175
172 GOTO 180
175 X$=G$
180 IF S=8 THEN 185
182 GOTO 200
185 X$=H$
190 GOTO 100
200 PRINT
210 PRINT "WHO BUMPED OFF"
215 PRINT "THE LORD OF THE MANOR ?"
220 PRINT
230 PRINT "WAS IT THE..."
240 PRINT A$,B$,C$,D$,E$,F$,G$,H$
250 PRINT
260 INPUT "WHODUNIT ?";P$
270 IF P$=X$ THEN 400
300 PRINT
310 PRINT
320 PRINT "NO, NOT THE ";P$
330 W=W+1
340 PRINT
350 PRINT
360 GOTO 200
400 PRINT
410 PRINT
```

```
420 PRINT "HOORAY !"
430 PRINT "THAT'S RIGHT"
440 PRINT
450 PRINT P$;" DID IT"
460 R=R+1
470 PRINT
480 PRINT "YOUR SCORE IS"
490 PRINT R;"RIGHT ";W;"WRONG"
500 FOR SR=1 TO 10
510 PRINT
520 NEXT SR
530 PRINT "PRESS P TO PLAY AGAIN"
540 PRINT "PRESS Q TO QUIT"
550 CALL KEY(0,Z,X)
560 IF X=0 THEN 550
570 IF Z=80 THEN 10
580 IF Z=81 THEN 600
590 GOTO 550
600 CALL CLEAR
610 PRINT "OKAY, BYE BYE"
620 PRINT
630 END
700 CALL CLEAR
730 PRINT TAB(8);"???????????"
735 PRINT TAB(8);"?          ?"
740 PRINT TAB(8);"? WHODUNIT ?"
745 PRINT TAB(8);"?          ?"
750 PRINT TAB(8);"???????????"
760 FOR SR=1 TO 7
770 PRINT
780 NEXT SR
790 RETURN
```

Appendix A: Game Timers

Event Timer

Place your computer in a corner and let it time your next chess match. Three-minute egg. Final exam.

The computer asks how many minutes you want for the event you are timing, and then it sounds a bell when the time has passed.

You can calibrate the clock by changing the value of SP in line 10. A larger number will slow down the clock. A smaller value for SP will speed up the clock. As you can see we have started with an SP value of 25.

If you want to time an event of less than one minute, use a decimal. For instance, when you want to time a 30-second event, respond to the computer's inquiry with .5 or for 45 seconds key in .75. Use .17 for 10 seconds; .25 for 15 seconds.

Program Listing

```
10 SP=25
20 CALL CLEAR
30 PRINT "EVENT TIMER"
40 PRINT "***********"
50 PRINT "HOW MANY MINUTES"
60 INPUT "TO THE END OF THE EVENT?":LT
70 PRINT
80 SP=SP/10
90 INPUT "TO START TIMING, PRESS ENTER":ST$
100 CALL CLEAR
110 C=C+1
120 IF C>(SP*LT*60)THEN 170
130 MN=INT(C/SP/60)
140 SC=INT((C/SP)-(60*MN))
150 PRINT MN;" MINUTES ";SC;" SECONDS"
160 GOTO 110
170 CALL CLEAR
180 CALL SOUND(100,150,0)
190 PRINT "TIME IS UP"
200 PRINT LT;" MINUTES HAVE PASSED"
210 PRINT
220 PRINT
230 PRINT
```

```
240 INPUT "TO TIME AGAIN, PRESS ENTER":KY$
250 C=0
260 GOTO 10
```

Stopwatch

Now you can leave that chrome-plated stopwatch at home next time you travel to your favorite auto or horse race. This program turns your computer into a handy stopwatch timer using the TV display.

When you RUN the program, the stopwatch will start counting seconds.

You can adjust the accuracy of the seconds count by changing the wait number in line 110. We show it set at 10. To slow down the timer, increase that number. To speed up the clock, decrease the number.

Program Listing

```
10 CALL CLEAR
15 PRINT "HOW MANY SECONDS"
20 PRINT "DO YOU WISH TO COUNT DOWN ?"
25 INPUT S
30 CALL CLEAR
35 PRINT S;"SECONDS"
40 PRINT " WILL BE COUNTED DOWN"
45 PRINT
50 PRINT " PRESS 'ENTER' KEY"
55 INPUT " TO START TIMING ":Q$
100 CALL CLEAR
105 FOR L=S TO 1 STEP -1
110 FOR WAIT=1 TO 10
115 NEXT WAIT
120 PRINT L;"SECONDS"
125 NEXT L
200 CALL CLEAR
210 PRINT "TIME IS UP"
220 PRINT
230 PRINT S;"SECONDS HAVE ELAPSED"
240 FOR SR=1 TO 5
250 PRINT
260 NEXT SR
270 GOTO 15
```

60-Second Timer

A one-minute timer can be very handy for fun-n-games. This easy-to-use clock counts off seconds up to 60.

The number of seconds counted can be changed by changing the number 60 in line 40.

The clock can be calibrated by changing the number 6 in line 60. Line 60 is a time-delay loop set for approximately one second.

Program Listing

```
10 CALL CLEAR
40 FOR TIMER=1 TO 60
50 PRINT TIMER;"SECONDS"
60 FOR PAUSE=1 TO 6
70 NEXT PAUSE
80 NEXT TIMER
90 PRINT
100 PRINT "END OF TIMING"
```

Appendix B: Random Numbers

Every 10th Answer

This program generates a random number in the range of zero to 999. However, it has a difference. It only shows you every tenth number it generates.

Line 20 generates the numbers. Line 40 selects the tenth number from each set.

Program Listing

```
10 RANDOMIZE
15 CALL CLEAR
20 T=INT(1000*RND)
30 V=V+1
40 IF 0.1*V=INT(0.1*V)THEN 44
42 GOTO 50
44 PRINT V,T
50 GOTO 20
```

Random Sampler

This program strengthens your confidence in the random number generator built into your computer.

It generates 100 numbers between zero and 100 and tells you how many of those are above 49 and how many are below 50. See the sample RUN for several sets of results in our recent test.

Program Listing

```
10 RANDOMIZE
20 CALL CLEAR
30 FOR L=1 TO 100
40 X=INT(101*RND)
50 IF X<50 THEN 70
60 GOTO 80
70 Y=Y+1
80 IF X>49 THEN 100
90 GOTO 110
100 N=N+1
110 NEXT L
120 PRINT Y;" YES"
130 PRINT N;" NO"
140 FOR B=1 TO 11
150 PRINT
160 NEXT B
170 N=0
180 Y=0
190 GOTO 30
```

Sample Run

```
50  YES
50  NO

53  YES
47  NO

46  YES
54  NO
```

Random Numbers: Zero To Nine

Although you see four program lines below, what we really have here is a very convenient single-line program for you to insert in a larger game or educational-testing program.

Line 20 is the winner here. It prints a random number from zero to nine every time. For your use here, we print that number on the screen. You could just as easily have the computer store that random number in a memory location for later recall and use.

We have added lines to make your computer show you a whole series of random numbers from zero to nine. Remember, line 20 is the important single-line program element here.

If you would like random numbers in the range from zero to 99, make it 100* in line 20. For zero to 999, use 1000* in line 20.

Program Listing

```
10 RANDOMIZE
15 CALL CLEAR
20 PRINT INT(10*RND)
30 GOTO 20
```

Appendix C: Dice Roll

Traditional Dice Roll

Here's a simple, brief way to roll and display results for two dice.

Lines 100-110 get a random number between 1 and 6 and store it in A. Lines 200-210 get another random number from 1 to 6 and store it in B.

Lines 300-310 print the contents of A and B along with a suitable message.

Program Listing

```
10 RANDOMIZE
20 CALL CLEAR
100 A=INT(7*RND)
110 IF A<1 THEN 100
200 B=INT(7*RND)
210 IF B<1 THEN 200
300 PRINT "FIRST DICE:",A
310 PRINT "SECOND DICE:",B
400 FOR L=1 TO 10
410 PRINT
420 NEXT L
430 PRINT "TO ROLL DICE AGAIN,"
440 INPUT "PRESS ENTER ":KY$
450 GOTO 20
```

See Two Dice

Here's a quick way to add real dice to any fun program you are designing for your computer.

This program rolls two dice and lets you see the results, as with real dice. This is especially useful in those games where it is important to see the value of each.

The subroutine in lines 100-140 generates the necessary pair of random numbers. Lines 60, 70 and 80 make the display you want.

Note that lines 60 and 80 each have nine asterisks. Line 140 is RETURN and must be the last line in the program.

After you type in and RUN the program, press ENTER on your computer 's keyboard to roll the dice.

Program Listing

```
10 RANDOMIZE
15 CALL CLEAR
20 PRINT "TO ROLL TWO DICE,"
30 INPUT "PRESS ENTER":KY$
40 PRINT
50 GOSUB 100
60 PRINT "*************"
70 PRINT "* ";DL;" * ";DR;" *"
80 PRINT "*************"
90 PRINT
95 GOTO 20
100 DL=INT(7*RND)
110 IF DL<1 THEN 100
120 DR=INT(7*RND)
130 IF DR<1 THEN 120
140 RETURN
```

See Four Dice

Two dice not enough for your game? Here's how to see four dice after a roll! The FOR/NEXT loop in lines 50-140 makes the computer roll and display four times rather than two times. If you need six, eight or ten dice on display, change the number two in line 50 to three, four or five.

Program Listing

```
10 RANDOMIZE
15 CALL CLEAR
20 PRINT "TO ROLL TWO DICE,"
30 INPUT "PRESS ENTER":KY$
40 CALL CLEAR
50 FOR L=1 TO 2
60 DQ=INT(7*RND)
70 IF DQ<1 THEN 60
80 DR=INT(7*RND)
90 IF DR<1 THEN 80
100 PRINT "**************"
110 PRINT "* ";DQ;" * ";DR;" *"
120 PRINT "**************"
130 PRINT
140 NEXT L
150 PRINT
160 PRINT
170 GOTO 20
```

Computer books from ARCsoft Publishers At Your Bookstore

For the TIMEX/Sinclair 1000, Sinclair ZX-81 and MicroAce:

Practical TIMEX/Sinclair Computer Programs for Beginners
Edward Page $7.95 ISBN 0-86668-027-6

101 TIMEX 1000/Sinclair ZX-81 Programming Tips & Tricks
Edward Page $7.95 ISBN 0-86668-020-9

TIMEX/Sinclair Computer Games Programs
Edward Page $7.95 ISBN 0-86668-026-8

37 TIMEX 1000/Sinclair ZX-81 Programs for Home, School & Office
Edward Page $8.95 ISBN 0-86668-021-7

TIMEX/Sinclair Computer Program Writing Workbook
Edward Page $4.95 ISBN 0-86668-810-2

For the Texas Instruments TI-99/4A Home Computer:

101 Programming Tips & Tricks for the Texas Instruments TI-99/4A
Len Turner $8.95 ISBN 0-86668-025-X

36 Texas Instruments TI-99/4A Programs for Home, School & Office
Len Turner $8.95 ISBN 0-86668-024-1

Texas Instruments Computer Program Writing Workbook
Len Turner $4.95 ISBN 0-86668-812-9

Texas Instruments Home Computer Games Programs
Len Turner $8.95 ISBN 0-86668-032-2

Texas Instruments Home Computer Graphics Programs
Len Turner $9.95 ISBN 0-86668-031-4

For the Commodore computers:

101 Programming Tips & Tricks for the VIC-20 and Commodore 64
Howard Adler $8.95 ISBN 0-86668-030-6

34 VIC-20 Computer Programs for Home, School & Office
Howard Adler $8.95 ISBN 0-86668-029-2

VIC-20 Computer Program Writing Workbook
Howard Adler $4.95 ISBN 0-86668-811-0

Commodore 64 Computer Programs for Beginners
Howard Adler $8.95 ISBN 0-86668-033-0

For the ATARI computers:

101 ATARI Computer Programming Tips & Tricks
Alan North $8.95 ISBN 0-86668-022-5

31 New ATARI Computer Programs for Home, School & Office
Alan North $8.95 ISBN 0-86668-018-7

ATARI Computer Program Writing Workbook
Alan North $4.95 ISBN 0-86668-814-5

For the TRS-80 Color Computer and TDP-100 computers:

Color Computer Graphics
Ron Clark $9.95 ISBN 0-86668-012-8

101 Color Computer Programming Tips & Tricks
Ron Clark $7.95 ISBN 0-86668-007-1

55 Color Computer Programs for Home School & Office
Ron Clark $9.95 ISBN 0-86668-005-5

55 MORE Color Computer Programs for Home, School & Office
Ron Clark $9.95 ISBN 0-86668-008-X

The Color Computer Songbook
Ron Clark $7.95 ISBN 0-86668-011-X

TRS-80 Color Computer Program Writing Workbook
Ron Clark $4.95 ISBN 0-86668-816-1

My Buttons Are Blue and Other Love Poems
Edited by Ron Clark $4.95 ISBN 0-86668-013-6

For the APPLE and Franklin ACE computers:

101 APPLE Computer Programming Tips & Tricks
Fred White $8.95 ISBN 0-86668-015-2

33 New APPLE Computer Programs for Home, School & Office
Fred White $8.95 ISBN 0-86668-016-0

APPLE Computer Program Writing Workbook
Fred White $4.95 ISBN 0-86668-813-7

For the TRS-80, Sharp and Casio Pocket Computers:

44 Programs for the TRS-80 Model 100 Portable Computer
Jim Cole $8.95 ISBN 0-86668-034-9

Practical PC-2/PC-1500 Pocket Computer Programs
Jim Cole $7.95 ISBN 0-86668-028-4

Pocket Computer Programming Made Easy
Jim Cole $8.95 ISBN 0-86668-009-8

99 Tips & Tricks for the New Pocket Computers
Jim Cole $7.95 ISBN 0-86668-019-5

101 Pocket Computer Programming Tips & Tricks
Jim Cole $7.95 ISBN 0-86668-004-7

Murder In The Mansion and Other Computer Adventures—2nd Edition
Jim Cole $6.95 ISBN 0-86668-501-4

50 Programs in BASIC for Home, School & Office—2nd Edition
Jim Cole $9.95 ISBN 0-86668-502-2

50 MORE Programs in BASIC for Home, School & Office
Jim Cole $9.95 ISBN 0-86668-003-9

Pocket Computer Program Writing Workbook
Jim Cole $4.95 ISBN 0-86668-817-X

35 Practical Programs for the CASIO Pocket Computer
Jim Cole $8.95 ISBN 0-86668-014-4

For the TRS-80 Model I and Model III computers:

TRS-80 Model I/III Computer Program Writing Workbook
Mark Lewis $4.95 ISBN 0-86668-815-3

For the IBM Personal Computer:

IBM Personal Computer Program Writing Workbook
George Bridges $4.95 ISBN 0-86668-818-8

Universal for use with any computer system:

Universal BASIC Computer Program Writing Workbook
Don Roberts $4.95 ISBN 0-86668-819-6

Texas Instruments Home Computer Book III

Texas Instruments Home Computer Games Programs

by Len Turner

Adventure games. Space games. Number games. Memory games. This brand-new book of BASIC software for the Texas Instruments TI-99/4A and other computers using TI BASIC is loaded with exciting, tested, ready-to-run programs especially written for your TI Home Computer.

Blast your way through a string of meteoroids and fight off alien hordes as you zip through deep space in *Saturn Death.*

Unscramble an egg. Test your memory against the electronic expert. Dip into a barrel of apples. Search for the mysterious *Black Pearl* of the Orient. Track down the African *Lost Safari.*

Imagine you are Hercule Poirot or Inspector Craddock as you unwind the tangled web of death in *Murder In The Mansion,* a powerful drama of maids, butlers, nannies, set in an old English manor with an Agatha Christie-style tale.

All of these and more are among the two-dozen highly entertaining programs in TI BASIC, each thoroughly tested on the TI-99/4A and ready to type in and run.

Even if you don't own the Texas Instruments computer, you still can play these unusual, stimulating games with only minor adaptations for whatever computer system you operate.

You, your family, your neighbors, friends, everybody will find hours of fun running and rerunning these challenging games: *Saturn Death, Memory Tester, The Black Pearl, Barrel of Apples, Lost Safari, Scrambled Egg, Old West Shootout, Craps, Decision Maker, Buried Treasure, Murder In The Mansion, Wood Chuck Chuck, Fractured Descriptions, Parameters, Smart Computer, Coin Toss, Klingon Killer, Super Slot-O, Draw Straws, Original Hi/Lo Game, Draw Sketches, Whodunit?, Game Timer, Dice Roll,* and many more.

ARCsoft Publishers
Woodsboro, Maryland

ISBN 0-86668-032-2